

UNITED STATE DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington. DC 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.		
09/445,201	04/12/00) BREIER	e	G	V0SS1110		
Г		HZ12/0216	٦		EXAMINER		
	LISA A HAILE			DRABIK,C			
GRAY CARY (SUITE 1600	GRAY CARY WARE & FREIDENRICH SUITE 1600			ART UNIT	PAPER NUMBER		
4365 EXECU		•		1633			
SAN DIEGO (CA 92121			DATE MAILED:	02/16/01		

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



DEPARTMENT OF COMMERCE

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.		
09/445,201	04/12/00	BREIER		G	V0SS1110		
		11644 0 704 04	\neg	EXAMINER			
LISA A HAIL	=	HM12/0131		DRABIK	/ C		
GRAY CARY WARE & FREIDENRICH				ART UNIT	PAPER NUMBER		
SUITE 1600					11		
4365 EXECUT				1633	(
SAN DIEGO C	A 92121			DATE MAILED			
			01/31/01				

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

		Applicatio	n No.	Applicant(s)					
Office Action Summany		09/445,20	1	BREIER ET AL.					
	Office Action Summary	Examiner		Art Unit					
		Christophe	r Drabik	1633					
The MAILING DATE of this communication appears on the cover sheet with the correspondence add Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status									
1)	Responsive to communication(s) filed on	·							
2a)	This action is FINAL . 2b) TI	his action is	non-final.		:				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4) Claim(s) 1-41 is/are pending in the application.									
	4a) Of the above claim(s) is/are withdra	awn from cor	sideration.						
5)	Claim(s) is/are allowed.								
6)	6) Claim(s) is/are rejected.								
7)	Claim(s) is/are objected to.								
8)⊠	Claims $\underline{1-41}$ are subject to restriction and/or	election requ	uirement.						
Application Papers									
9)[The specification is objected to by the Examir	ier.							
10)	The drawing(s) filed on is/are objected	to by the Ex	aminer.						
11) The proposed drawing correction filed on is: a) □ approved b) □ disapproved.									
12) The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. § 119									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) All b) Some * c) None of:									
1. Certified copies of the priority documents have been received.									
2. Certified copies of the priority documents have been received in Application No									
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the extended detailed Office paties for a list of the patified expise pet received.									
* See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).									
14) — Acknowledgement is made of a claim for domestic priority under 30 0.3.0. § 119(e).									
Attachmant/a)									
Attachmen	t(s) ice of References Cited (PTO-892)		18) 🔲 Interview Summa	ry (PTO-413) Paper l	No(s)				
16) 🔲 Not	ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s))		Patent Application (

Art Unit: 1633

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-11, 13,14,17-24, 34 and 35 drawn to a recombinant DNA molecule or vector comprising the first regulatory sequence of the Vascular Endothelial Growth factor (VEGF) receptor-2 (Flk-1) gene and heterologous sequences, and a method of inhibiting a vascular disease.

Group II, claim (s) 12, 15, 16 and 25 drawn to antisense RNA of heterologous DNA recited as comprising the recombinant nucleic acid of claim 1 and a diagnostic composition utilizing said antisense construct.

Group III, claims 36, 37 and 39 drawn to a method of producing a pharmaceutical composition using the DNA molecule of claim 1, the vector of claim 17 or the nucleic acid of claim 16, wherein the composition is an as yet unidentified compound.

Art Unit: 1633

Group IV, claim(s) 26-29, 31-33 and 41 drawn to a method of producing a transgenic animal, a transgenic animal or mouse produced by said method, a method of identifying chemical or biologic substances *capable of suppressing* the transcription of a gene in endothelial cells employing said transgenic animal and a method for the production of a pharmaceutical composition using said transgenic animal.

Group V, claim(s) 26-28, 30,31 and 41 drawn to a method of producing a transgenic animal, a transgenic animal or mouse produced by said method and a method of identifying chemical or biologic substances *capable* of *enhancing* or *activating* the transcription of a gene in endothelial cells employing said transgenic animal

Group VI, claim(s) 29, 31-33, drawn to a method of identifying chemical or biologic substances *capable of suppressing* the transcription of a gene in endothelial cells by contacting cells transformed according to Claim 20 and a method for the production of a pharmaceutical composition using said transformed cells.

Group VII, claim(s) 30 and 31, drawn to a method of identifying chemical or biologic substances *capable of enhancing or activating* the transcription of a gene in endothelial cells by contacting cells transformed according to Claim 20 and a method for the production of a pharmaceutical composition using said transformed cells.

Art Unit: 1633

Group VIII, claim(s) 38 drawn to the use of a recombinant DNA molecule for the production of a pharmaceutical composition for inducing a vascular disease.

Group IX, claim(s) 40 drawn to a method of using a regulatory sequence for enhancing and/or directing gene expression in endothelial cells.

The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:.

The special technical feature of Group I is a recombinant DNA useful as a therapeutic agent; Group II is a antisense RNA molecule; Group III is a method of producing a pharmaceutical composition; Group IV is a transgenic animal useful for identifying chemical or biologic substances capable of suppressing the transcription of a gene in endothelial cells; Group V is a transgenic animal useful for identifying chemical or biologic substances capable of activating or enhancing the transcription of a gene in endothelial cells; Group VI are transformed cells useful for identifying chemical or biological substances capable of suppressing the transcription of a gene in endothelial cells; Group VII are transformed cells useful for identifying chemical or biological substances capable of activating or enhancing the transcription of a gene in endothelial cells; Group VIII use of a recombinant DNA molecule for the production of a pharmaceutical composition for inducing a vascular disease; Group IX the use of a regulatory sequence for enhancing and/or directing gene expression.

Art Unit: 1633

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Drabik whose telephone number is 703-605-1156. The examiner can normally be reached on Monday-Friday from 9am to 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Clark, can be reached on (703) 703-305-4051. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234. Questions regarding review of formality issues may be directed to Kim Davis, the patent analyst assisting in this application. She may be reached at 703-308-4242.

DEBORAH J. R. CLARK SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600